

WHAT IS CLAIMED IS:

1. An objective lens unit comprising:

a holder that is provided on a shaft on an actuating base to be slidable along the shaft in a focusing direction and to be swingable about the shaft in a tracking direction;

a light passage hole penetratingly provided in a distal end portion of the holder;

a lens receiving seat formed on an inner peripheral surface of the light passage hole with a fitting groove whose diameter than that of the light passage hole, the fitting groove concentrically formed at one end portion of the light passage hole;

a plurality of filling recesses formed on an inner peripheral surface of the fitting groove at intervals of a predetermined angle in a circumferential direction;

an objective lens fitted in the light passage hole and mounted on the lens receiving seat; and

an ultraviolet curing adhesive filled into each of the filling recess and cured by application of ultraviolet rays thereto to fix the objective lens to the holder,

wherein a longitudinal sectional shape of each of the filling recesses is formed to be substantially triangular shape by inclining a bottom surface of each of the filling recesses from one end face of the holder toward the lens receiving seat,

wherein both inner side surfaces opposing each other with the bottom surface of each of the filling recesses placed therebetween are formed in a circular arc shape so as a transverse sectional shape of each of the filling
5 recesses is formed substantially in a U-lettered shape with a narrow bottom, and

wherein a plan view shape of each of the filling recesses is formed substantially in a U-lettered shape whose innermost side is narrowed so that an innermost-end
10 circular arc portion of each of the filling recesses is formed on a center line extending from a center of the light passage hole and passing through a center of each of the filling recesses.

2. An objective lens unit comprising:

15 a holder that is provided on a shaft on an actuating base to be slidable along the shaft in a focusing direction and to be swingable about the shaft in a tracking direction;

a light passage hole penetratingly provided in a distal end portion of the holder;

20 a lens receiving seat formed on an inner peripheral surface of the light passage hole with a fitting groove whose diameter than that of the light passage hole, the fitting groove concentrically formed at one end portion of the light passage hole;

25 a plurality of filling recesses formed on an inner

peripheral surface of the fitting groove at intervals of a predetermined angle in a circumferential direction;

an objective lens fitted in the light passage hole and mounted on the lens receiving seat; and

5 an ultraviolet curing adhesive filled into each of the filling recess and cured by application of ultraviolet rays thereto to fix the objective lens to the holder,

wherein a longitudinal sectional shape of each of the filling recesses is formed to be substantially triangular
10 shape by inclining a bottom surface of each of the filling recesses from one end face of the holder toward the lens receiving seat.

3. The objective lens unit according to claim 2, wherein both inner side surfaces opposing each other with the
15 bottom surface of each of the filling recesses placed therebetween are formed in a circular arc shape so as a transverse sectional shape of each of the filling recesses is formed substantially in a U-lettered shape with a narrow bottom.

20 4. The objective lens unit according to claim 2, wherein a plan view shape of each of the filling recesses is formed substantially in a U-lettered shape whose innermost side is narrowed so that an innermost-end circular arc portion of each of the filling recesses is formed on a center line
25 extending from a center of the light passage hole and

passing through a center of each of the filling recesses.